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Cat. No. 14-505B

OWNER'S MANUAL

Please read before using this equipment.

CD-3327

Portable Triple Play Compact Disc Player

with AM/FM Stereo
Cassette Recorder

OPTIMUS®

FEATURES

Your Optimus CD-3327 Portable Triple Play Compact Disc Player combines a CD player, an AM/FM radio, and a cassette player with detachable speakers — all in one convenient, portable package.

CD Player Features

Programmable Play — lets you program up to 16 tracks to play in any sequence you choose.

Audible Search — helps you locate a particular section of a track by playing the CD rapidly in either direction.

Automatic Search Music System (ASMS) — quickly locates and plays any track on a CD.

Repeat Play — lets you automatically repeat a single track, an entire CD, or a series of programmed tracks.

Cassette Deck Features

Two Source Recording — lets you record from the CD player and the radio.

Automatic Level Control (ALC) — automatically adjusts the recording level.

Other Features

Tone Control — lets you enhance bass or treble sounds.

Two Power Options — lets you use standard AC power (with the supplied AC power cord) or internal batteries (not supplied).

We recommend you record your system's serial number here. The number is on the bottom of the CD-3327.

Serial Number _____

WARNING: To reduce the risk of fire or shock hazard, do not expose this product to rain or moisture.

CAUTION

RISK OF ELECTRIC SHOCK. DO NOT OPEN.

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER OR BACK. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED PERSONNEL.

This symbol is intended to alert you to the presence of uninsulated dangerous voltage within the product's enclosure that might be of sufficient magnitude to constitute a risk of electric shock. Do not open the product's case.

This symbol is intended to inform you that important operating and maintenance instructions are included in the literature accompanying this product.

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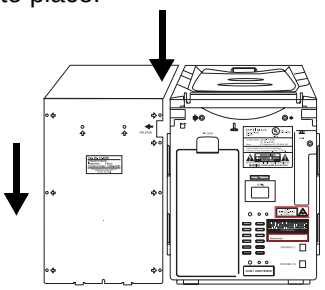
PREPARATION

CONNECTING THE SPEAKERS

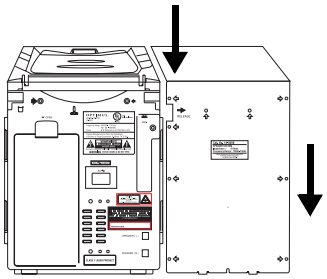
Caution: Do not plug in the power cord or install batteries until you connect the speakers. Operating the CD-3327 without speakers connected could damage it.

Follow these steps to connect the speakers to the system.

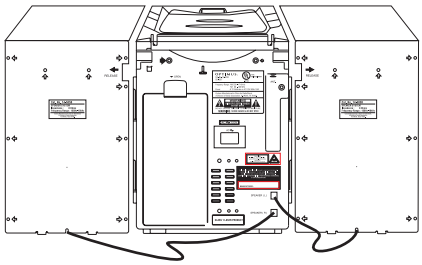
1. Align the dovetails on the side of the right speaker with the tracks on the right end of the main system and slide the speaker down until it clicks into place.



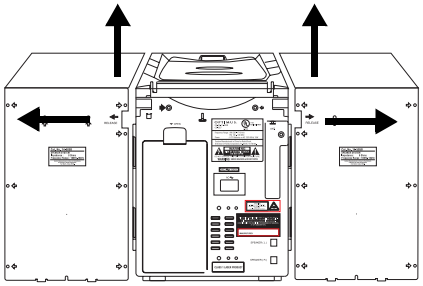
2. Align the dovetails on the side of the left speaker with the tracks on the left end of the main system and slide the speaker down until it clicks into place.



3. Plug the right speaker's connector into **SPEAKER (R)** and the left speaker's connector into **SPEAKER (L)** on the back of CD-3327.



To disconnect the speakers from the system, first unplug the speaker connectors from the CD-3327. Hold down the main system while you press the tab on the back of each speaker in the direction of the arrow and slide each speaker upward along the tracks.



CONNECTING POWER

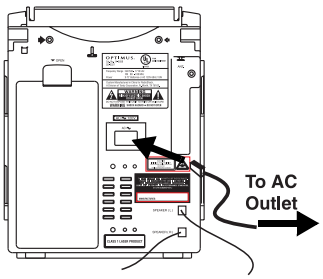
You can power your CD-3327 from either:

- standard AC power (with the supplied power cord)
- eight D batteries (not supplied)

Note: Connecting the power cord disconnects internal batteries.

Using AC Power

To use AC power, plug the supplied power cord into the **AC~** jack on the back of the CD-3327. Then plug the other end into a standard AC outlet.



Cautions:

- The plug's blades are polarized (one blade is wider than the other) and fit only one way. If the plug does not fit easily, turn it over and try again. Do not force it.
- Always unplug the power cord from the AC outlet before you unplug it from the CD-3327.

Using Batteries

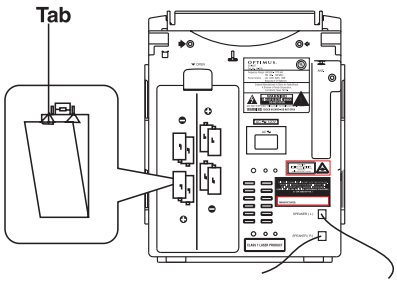
You can use eight D batteries (not supplied) to power the CD-3327. For the best performance and longest life, we recommend alkaline batteries, available at your local RadioShack store.

Cautions:

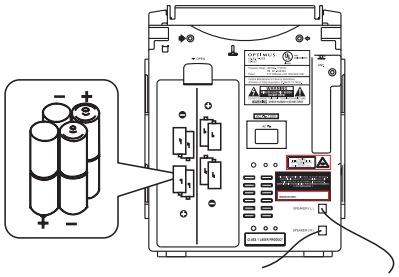
- Use only fresh batteries of the required size and recommended type.
- Do not mix old and new batteries, different types of batteries (standard, alkaline, or rechargeable), or rechargeable batteries of different capacities.

Follow these steps to install batteries.

1. Remove the battery compartment cover by pushing the cover's tab downward and lifting off the cover.



2. Put eight D batteries in the battery compartment as indicated by the polarity symbols (+ and –) marked inside.



3. Replace the cover and snap it shut.

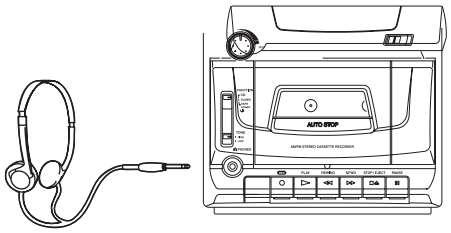
When the sound weakens or the CD-3327 stops operating properly, replace all eight batteries.

Cautions:

- Always remove old or weak batteries. Batteries can leak chemicals that can destroy electronic parts.
- If you do not plan to use the CD-3327 with batteries for several weeks, or if you plan to power the CD-3327 using only AC power, remove the batteries.

USING HEADPHONES

For private listening, plug a pair of optional stereo headphones with a 1/8-inch (3.5-mm) plug into the 🎧 **PHONES** jack. Your local RadioShack store has a wide selection of headphones.



Listening Safely

To protect your hearing, follow these guidelines when you use headphones.

- Set the volume to its lowest setting before you begin listening. After you begin listening, adjust the volume to a comfortable listening level.
- Do not listen at extremely high volume levels. Extended high-volume listening can lead to permanent hearing loss.
- Once you set the volume, do not increase it. Over time your ears adapt to the listening level, so a volume level that does not cause discomfort might still damage your hearing.

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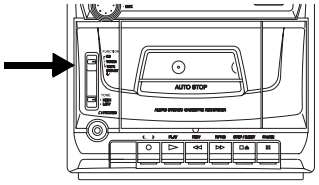
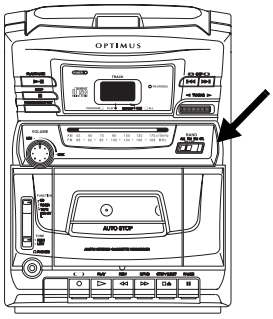
USING THE RADIO

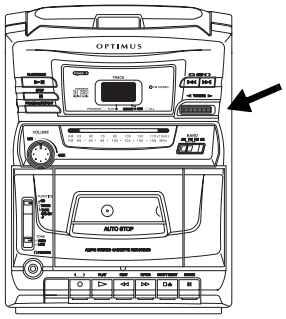
1. Set **FUNCTION** to **TUNER** to turn on the radio. POWER lights.



2. Set **BAND** to **AM**, **FM**, or **FM ST**.



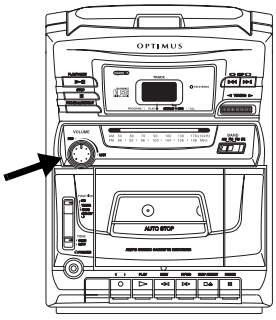
3. Adjust **TUNING** to the desired station.



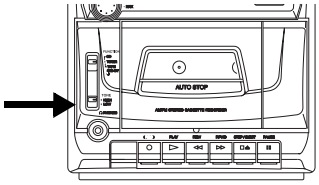
Notes:

- When you set **BAND** to **FM ST.** and the radio receives an FM station in stereo, the FM STEREO indicator lights.
- To improve reception for weak FM stations, set **BAND** to **FM**. The sound is no longer in stereo, but reception should improve.

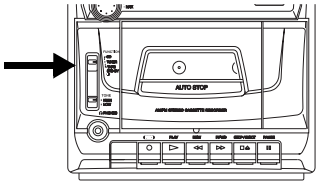
4. Adjust **VOLUME** to a comfortable listening level.



5. Set **TONE** to **HIGH** to enhance the treble sound, or to **LOW** to enhance the bass.



6. To turn off the radio, set **FUNCTION** to **TAPE/STD-BY** ⏻. POWER turns off.

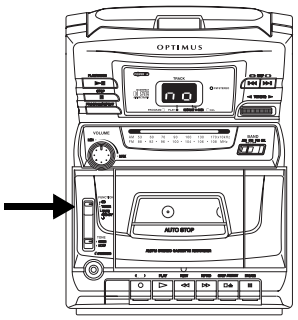


USING THE CD PLAYER

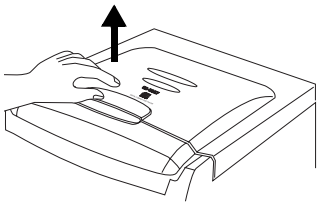
LOADING AND PLAYING A CD

The CD-3327 plays both 3- and 5-inch CDs.

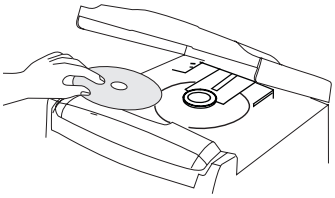
1. Set **FUNCTION** to **CD**. POWER lights. If no CD is loaded, **00** then **no** appears. If a CD is in the compartment, **00** then the total number of tracks on the CD appears.



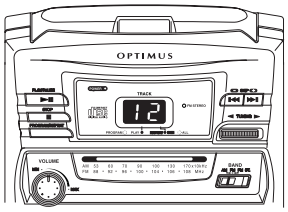
2. Lift open the CD compartment's door.



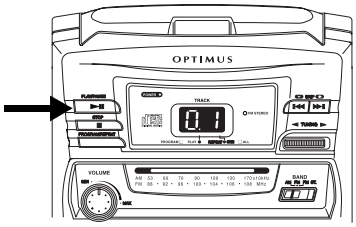
3. Place a CD securely in the compartment with the label side facing up.



4. Close the door. **00** then the total number of tracks appears.

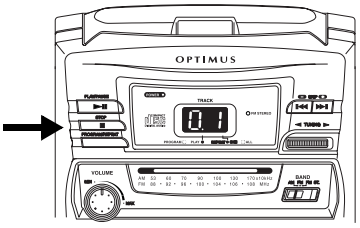


5. Press **PLAY/PAUSE**. The current track number appears, and the CD-3327 then plays all the tracks in order.



6. Adjust **VOLUME** to a comfortable listening level and set **TONE** to **HIGH** to enhance the treble sound, or to **LOW** to enhance the bass sound.

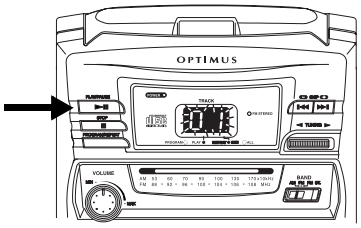
7. The CD-3327 stops automatically after it plays all the tracks. To stop play before the end of the last track, press **STOP**.



SPECIAL FEATURES

Pause

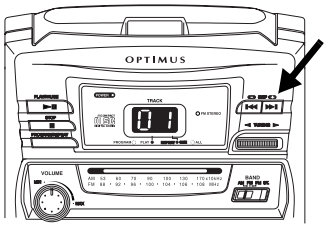
To pause a CD during play, press **PLAY/ PAUSE**. The track number blinks and the CD stops playing.



To resume play, press **PLAY/PAUSE** again.

Audible Search

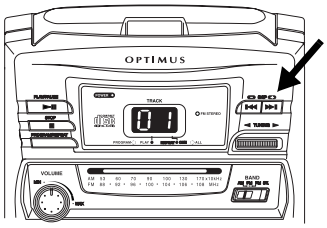
To search forward on the CD, hold down **SKIP ▸▸|** during play. As you hold down **SKIP ▸▸|**, the CD rapidly advances and you hear the tracks at a faster speed and lower volume. Release **SKIP ▸▸|** to resume normal play.



To search backward, hold down **SKIP |◂◂** during play. Release **SKIP |◂◂** to resume normal play.

Automatic Search Music System (ASMS)

You can use the automatic search music system to skip forward or backward through tracks on a CD or tracks in a programmed sequence (see “Programmed Play” on Page 10).



During play, press and release **SKIP ▸▸|** to skip to the beginning of the next track.

During play, press and release **SKIP |◂◂** to skip to the beginning of the current track.

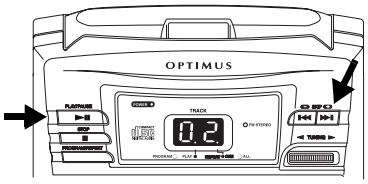
Repeatedly press **SKIP ▸▸|** or **|◂◂** to skip forward or backward through additional tracks.

Notes:

- If you press **SKIP |◂◂** while the first track is playing, the last track will play.
- If you press **SKIP ▸▸|** while the last track is playing, the first track will play.

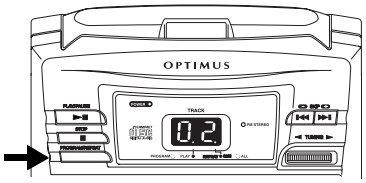
Cue

To select a track before you begin play or while a CD is paused, press **SKIP ▶▶|** or **|◀◀** until the desired track number appears on the display. Then press **PLAY/ PAUSE** to play the track.



Repeat

You can repeatedly play one track, a programmed sequence (see "Programmed Play"), or an entire CD.



To repeat a single track, press **PROGRAM/REPEAT** during play. The **REPEAT ONE/ALL** indicator lights.

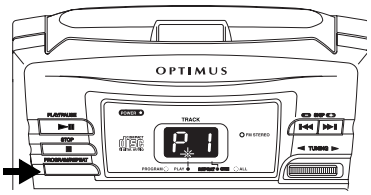
To repeat an entire CD or programmed sequence, press **PROGRAM/REPEAT** twice during play. The **REPEAT ONE/ALL** indicator blinks.

To cancel repeat play, press **PROGRAM/ REPEAT** so the **REPEAT ONE/ALL** indicator turns off.

PROGRAMMED PLAY

You can program up to 16 tracks on a loaded CD to play in any sequence. Follow these steps to program and play a sequence of tracks.

1. Press **PROGRAM/REPEAT** before play. **P1** (the programmed track number) appears and the program indicator blinks.



2. Press **SKIP ▶▶|** or **|◀◀** to find the track you want to program into memory.
3. Press **PROGRAM/REPEAT** again to select the track. **P2** appears.
4. Repeat Steps 2 and 3 for each track you want to program.

Notes:

- From the 10th to the 16th programmed tracks, the CD-3327 displays a code instead of a track number (as shown here).

  P.0 = P10 **P.a** = P11

  P.b = P12 **P.c** = P13

  P.d = P14 **P.E** = P15

  P.F = P16

- If you program more than 16 tracks, you replace the first previously programmed track with the newest one.

- After programming a sequence of tracks, you can review the tracks by pressing **PROGRAM/REPEAT** and then **SKIP ▸▸|** or **|◂◂**.
- To add to the programmed sequence, press **PROGRAM/REPEAT** until you reach the end of the program and the next sequence is available. Then press **SKIP ▸▸|** or **|◂◂** to find the track you want and press **PROGRAM/REPEAT** again to store the new track.

5. Press **PLAY/PAUSE** to play the programmed tracks in sequence.

Notes:

- Press **SKIP ▸▸|** and **|◂◂** to move through the programmed sequence during play.
- Press **STOP**, **PROGRAM/REPEAT** then **PLAY/PAUSE** to start playing the sequence again from the beginning.

To clear the program from memory, press **STOP**, then either:

- open the CD door, or
- set **FUNCTION** to a setting other than **CD**

CD AND CD PLAYER CARE TIPS

Although a CD is very durable, you should handle it with care. We recommend the following precautions.

- Keep the CD in its protective case or sleeve when you are not playing it.
- Keep the CD clean. Your local RadioShack store sells a suitable CD cleaner kit.
- Keep the CD dry. A drop of moisture can act as a lens and affect the laser beam's focus. If the CD gets wet, wipe it with a soft, dry cloth before playing it.
- Do not write on either side of a CD, especially the non-label side.
- Handle the CD by its edge to avoid fingerprints and surface scratches, which can prevent the laser from accurately reading the CD. To clean the surface, use a CD Cleaner Kit (such as Cat. No. 42-226) or Scratch 'n Fix (Cat. No. 42-127).
- Do not store CDs in high-temperature, high-humidity locations.

If the CD-3327 is subjected to a sudden shock or jolt during play, the CD's rotation speed might suddenly change, and the music might be briefly interrupted or the current track might start over. This is not a malfunction.

Cautions:

- To avoid damaging the CD player, do not place anything but a CD in the CD compartment.
- Remove any loaded CD from the CD player before moving the CD-3327 to prevent damaging the CD.

- Moving the CD player suddenly from a cold place to a warmer one can cause moisture to form on the pickup lens and disrupt operation. If this happens, wait about 2 hours for the moisture to evaporate before playing a CD.

Notes:

- Most CDs that can be played on this player have this mark on them:

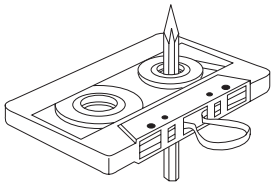
- Most material on compact discs and prerecorded tapes is copyrighted. Unauthorized duplication of copyrighted material is a violation of the copyright laws of most countries and such duplication may result in fines and/or imprisonment. Note, however, that in the United States, it is not a violation of U.S. copyright laws for a consumer to use an audio recording device to duplicate musical recordings for noncommercial (personal) use.

USING THE CASSETTE PLAYER

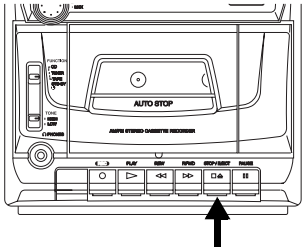
The CD-3327's cassette deck lets you play your favorite cassette tapes and make recordings from the radio or CD player.

LOADING A CASSETTE TAPE

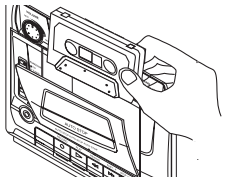
1. Take up any slack in the cassette tape by turning the hub with a pencil. If you do not remove excess slack, the tape might become tangled in the record/playback mechanism. Avoid touching the tape.



2. Press **STOP/EJECT** to open the cassette compartment door.



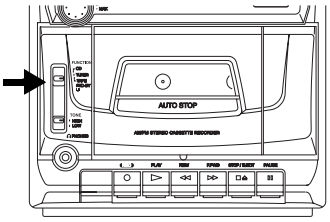
3. Load a cassette tape in the cassette compartment door with the side you want to play facing you, the exposed tape edge down, and the full reel to the left.



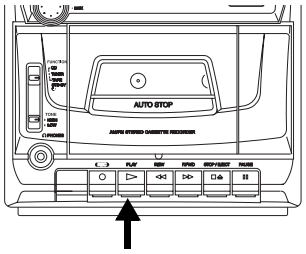
4. Close the door.

PLAYING A CASSETTE TAPE

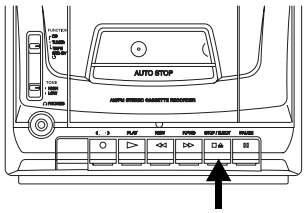
1. With a cassette loaded, set **FUNCTION** to **TAPE/STD-BY** ⏻.



2. Press **PLAY** on the cassette deck. POWER lights.

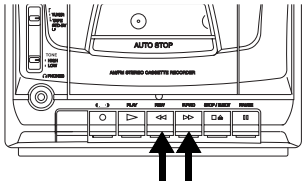


3. Adjust **VOLUME** to a comfortable listening level and set **TONE** to **HIGH** to enhance the treble sound, or to **LOW** to enhance the bass sound.
4. The CD-3327 automatically stops when it reaches a tape's end. To stop it sooner, press **STOP/EJECT**. POWER dims.

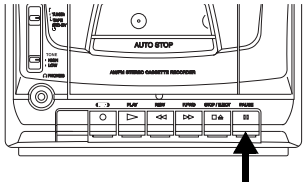


Notes:

- While the tape is stopped, press **F.FWD** or **REW** to move the tape rapidly forward or backward. Press **STOP/EJECT** when you reach the desired section or when the tape reaches the end.



- Press **PAUSE** to temporarily stop play. Press **PAUSE** again to resume play.



5. Press **STOP/EJECT** again to open the compartment, then remove the cassette tape.

RECORDING

You can record from the CD player or radio.

Notes:

- The CD-3327's Automatic Level Control (ALC) automatically adjusts the recording level. **VOLUME** has no effect on recording.
- Tape quality greatly affects the quality of the recording. We recommend regular length (60- or 90-minute) cassette tapes. We do not recommend long-play cassette tapes such as C-120s because they are thin and can easily tangle. For low-noise, wide-range recordings, use normal-bias tape.
- Before you load a cassette tape for recording, turn the cassette's hub with your finger or a pencil to move the tape past its leader.
- Before recording, be sure the erase-protection tabs are in place on the cassette tape you are using to record. See "Preventing Accidental Erasure" on Page 16.

Caution: If you try to record on a cassette tape that has had the erase-protection tabs removed, you cannot press down **RECORD**. Do not force it, as this can damage the mechanism.

Recording from the CD Player

1. Set **FUNCTION** to **CD** and load a CD.

   Notes:

   - If needed, press **SKIP** |◄◄ or ►►| to find the desired track.
   - To record a programmed sequence, see "Programmed Play" on Page 10 to store the tracks first.

2. Load a cassette tape in the cassette compartment.
3. Press **PLAY/PAUSE** twice on the CD player to pause the CD. The track number blinks.
4. Press **REC**. Both **REC** and **PLAY** lock down.
5. Press **PLAY/PAUSE** on the CD. The CD starts playing and the cassette deck begins recording from the CD.

   Notes:

   - You can listen to the CD as you record.
   - To skip an unwanted section during recording, press **PAUSE** on the cassette deck while the section plays. To resume recording, press **PAUSE** again.

6. The tape automatically stops when it reaches the end. To stop the CD player, press **STOP**. To stop recording before the tape reaches the end, press **STOP/EJECT**.

Recording from the Radio

1. Load a cassette tape in the cassette compartment.
2. Set **FUNCTION** to **TUNER**.
3. Set **BAND** to **AM**, **FM**, or **FM ST**.
4. Press **REC** on the cassette deck to begin recording. Both **REC** and **PLAY** lock down.

   Note: To skip an unwanted section during recording, press **PAUSE** while the section plays. To resume recording, press **PAUSE** again.

5. The tape automatically stops when it reaches the end. To stop recording before the tape reaches the end, press **STOP/EJECT**.

TAPE TIPS

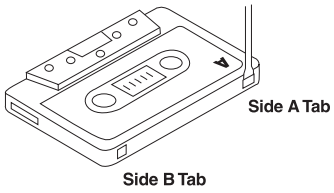
Erasing a Cassette Tape

If you no longer want a recording, you can record over it or erase it. To record over a cassette tape, simply record over the previous recording. To erase the entire cassette tape, let the tape record to the end with **FUNCTION** set to **TAPE/STD-BY** ⏻.

You can quickly erase both sides of a cassette tape using a bulk tape eraser, available at your local RadioShack store.

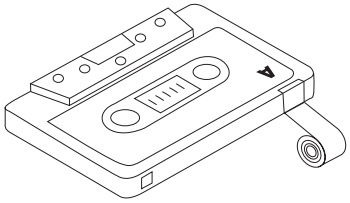
Preventing Accidental Erasure

Cassette tapes have two erase-protection tabs, one for each side. To protect a recording from being accidentally recorded over or erased, use a screwdriver to remove one or both of the cassette tape's erase-protection tabs.



Note: Removing the erase-protection tabs does not prevent a bulk eraser from erasing a cassette tape.

If you want to record on a tape side after you have removed the erase-protection tab, place a piece of strong plastic tape over that side's erase-protection hole. Be sure you cover only the hole originally covered by the erase-protection tab.



Restoring Tape Tension and Sound Quality

After playing a cassette tape several times, the tape might become tightly wound on the reels. This can cause playback sound quality to deteriorate.

To restore the sound quality, fast-forward the tape from the beginning to the end of one side, then completely rewind it. Then loosen the tape reels by gently tapping each side of the cassette's outer shell on a flat surface.

Caution: Be careful not to damage the cassette when tapping it. Do not touch the exposed tape or allow any sharp objects near the cassette.

CARE AND MAINTENANCE

Your Optimus CD-3327 Portable Triple Play Compact Disc Player is an example of superior design and craftsmanship. The following suggestions will help you care for your CD-3327 so you can enjoy it for years.

Keep the CD-3327 dry. If it gets wet, wipe it dry immediately. Liquids might contain minerals that can corrode the electronic circuits.

Use and store the CD-3327 only in normal temperature environments. Temperature extremes can shorten the life of electronic devices, damage batteries, and distort or melt plastic parts.

Keep the CD-3327 away from dust and dirt, which can cause premature wear of parts.

Handle the CD-3327 gently and carefully. Dropping it can damage circuit boards and cases and can cause the CD-3327 to work improperly.

Use only fresh batteries of the required size and recommended type. Batteries can leak chemicals that damage your CD-3327's electronic parts.

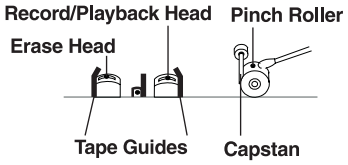
Wipe the CD-3327 with a damp cloth occasionally to keep it looking new. Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the CD-3327.

Modifying or tampering with the CD-3327's internal components can cause a malfunction and might invalidate its warranty and void your FCC authorization to operate it. If your CD-3327 is not performing as it should, take it to your local RadioShack store for assistance.

CLEANING THE TAPE-HANDLING PARTS

Dirt, dust, or particles of the tape's coating can accumulate on the tape heads and other parts that the tape touches. This can greatly reduce the performance of the CD-3327. Use the following cleaning procedure after every 20 hours of operation.

1. Remove the batteries and disconnect the AC power cord.
2. Open the cassette compartment door.
3. To expose the tape-handling parts, press **PLAY** on the deck and press in on the protection tab sensor.
4. Use a cotton swab dipped in denatured alcohol or tape head cleaning solution to clean the tape guides, record/playback head, pinch roller, capstan, and erase head.



5. When you finish cleaning, press **STOP/EJECT** on the deck and close the cassette compartment door. Then reconnect power.

Your local RadioShack store sells a complete line of cassette deck cleaning supplies.

FCC NOTICE

This system complies with the limits for a Class B digital device as specified in Part 15 of *FCC Rules*. These limits provide reasonable protection against radio and TV interference in a residential area. However, your equipment might cause TV or radio interference even when it is operating properly. To eliminate interference, you can try one or more of the following corrective measures.

- reorient or relocate the receiving antenna
- increase the distance between the equipment and the radio or TV
- use outlets on different electrical circuits for the equipment and the radio or TV

Consult your local RadioShack store if the problem still exists

If you cannot eliminate the interference, the FCC requires that you stop using your CD-3327.

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SPECIFICATIONS

RADIO

Frequency Range ..... AM: 530–1710 kHz
FM: 88–108 kHz

CASSETTE PLAYER

Tape Speed ..... $1^{7}/_{8}$ ips

Tape System ..... 4 Track Stereo

Recording System ..... AC Bias

Erasing System ..... Magnet Erase

Wow and Flutter ..... 0.35% or less

CD PLAYER

Number of Tracks to be Programmed ..... 16 Tracks

Frequency Response (±4 dB) ..... 100 Hz–20 KHz

Signal-To-Noise (A-WTD) ..... 65 dB (nominal) with BPF

Sampling Frequency ..... 44.1 kHz

Oversampling ..... 8 Times

Harmonic Distortion 0.5%

GENERAL

Speaker ..... Detachable, 4 × 2 Inches

Speaker Impedance ..... 8 ohm

Power Requirements ..... DC 12 V (8 D batteries),
AC 120 V, 60 Hz

Output Power (10% THD) ..... 1.2 W/Channel

Unit Dimensions (HWD) ..... $9^{5}/_{16} \times 6^{15}/_{16} \times 8^{3}/_{16}$ Inches
(236.5 × 176.2 × 207.9 mm)

Speaker Dimensions (HWD) ..... $9^{1}/_{8} \times 6 \times 6^{7}/_{16}$ Inches
(231 × 152 × 163 mm)

Unit Weight (without batteries) ..... 5.3 lbs (2.4 kg)

Speaker Weight (each) ..... 1.8 lbs (0.81 kg)

Specifications are typical; individual units might vary. Specifications are subject to change and improvement without notice.

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Limited Ninety-Day Warranty

This product is warranted by RadioShack against manufacturing defects in material and workmanship under normal use for ninety (90) days from the date of purchase from RadioShack company-owned stores and authorized RadioShack franchisees and dealers. EXCEPT AS PROVIDED HEREIN, RadioShack MAKES NO EXPRESS WARRANTIES AND ANY IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE DURATION OF THE WRITTEN LIMITED WARRANTIES CONTAINED HEREIN. EXCEPT AS PROVIDED HEREIN, RadioShack SHALL HAVE NO LIABILITY OR RESPONSIBILITY TO CUSTOMER OR ANY OTHER PERSON OR ENTITY WITH RESPECT TO ANY LIABILITY, LOSS OR DAMAGE CAUSED DIRECTLY OR INDIRECTLY BY USE OR PERFORMANCE OF THE PRODUCT OR ARISING OUT OF ANY BREACH OF THIS WARRANTY, INCLUDING, BUT NOT LIMITED TO, ANY DAMAGES RESULTING FROM INCONVENIENCE, LOSS OF TIME, DATA, PROPERTY, REVENUE, OR PROFIT OR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, EVEN IF RadioShack HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Some states do not allow the limitations on how long an implied warranty lasts or the exclusion of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

In the event of a product defect during the warranty period, take the product and the RadioShack sales receipt as proof of purchase date to any RadioShack store. RadioShack will, at its option, unless otherwise provided by law: (a) correct the defect by product repair without charge for parts and labor; (b) replace the product with one of the same or similar design; or (c) refund the purchase price. All replaced parts and products, and products on which a refund is made, become the property of RadioShack. New or reconditioned parts and products may be used in the performance of warranty service. Repaired or replaced parts and products are warranted for the remainder of the original warranty period. You will be charged for repair or replacement of the product made after the expiration of the warranty period.

This warranty does not cover: (a) damage or failure caused by or attributable to acts of God, abuse, accident, misuse, improper or abnormal usage, failure to follow instructions, improper installation or maintenance, alteration, lightning or other incidence of excess voltage or current; (b) any repairs other than those provided by a RadioShack Authorized Service Facility; (c) consumables such as fuses or batteries; (d) cosmetic damage; (e) transportation, shipping or insurance costs; or (f) costs of product removal, installation, set-up service adjustment or reinstallation.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

RadioShack Customer Relations, Dept. W, 100 Throckmorton St., Suite 600, Fort Worth, TX 76102

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